



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,971	07/12/2005	Simon Andrew Huber Muir	DS-001	8856
38051	7590	10/03/2007		
KIRK HAHN 14431 HOLT AVE SANTA ANA, CA 92705			EXAMINER CERNOCH, STEVEN MICHAEL	
			ART UNIT	PAPER NUMBER
			3709	
			MAIL DATE	DELIVERY MODE
			10/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/541,971

Applicant(s)

MUIR, SIMON ANDREW HUBER

Examiner

Steven M. Cernoch

Art Unit

3709

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/12/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/04/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In response to the Preliminary Amendment filed on July 2, 2005, claim 21 has been cancelled, and claims 1-20 and 22 are pending.

Drawings

2. The drawings are objected to because Figure 7 has an incomplete indicator line with no numeral represented. In addition, the drawings are also objected to because they do not include the reference number "79" for the screw coupler mentioned in the description of Figs. 5 to 7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3700

Specification

3. The disclosure is objected to because of the following informalities: On page 12 of the disclosure, lines 12, 17 and 19, two different structural elements, the main body and the window, are denoted by the same reference numeral, 53. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-20 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "and/or" renders the claim indefinite because it is an alternate expression and is subject to more than one interpretation.

Regarding claim 20, it is a confusing hybrid claim. It is rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, specifically, it is not understood as to what structural elements of claim 1 are being incorporating into the scope of the claim. It is suggested that all the needed structural elements from claim 1 should be clearly recited therein, so as to overcome the vague and indefinite rejection.

Claims 2-19 and 22 are rejected for incorporating the above errors from their respective parent claims by dependency.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-7, 11-15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moulder et al. (US Pat No 3,343,918) in view of Glazier et al. (US Pat No 968,462).

Regarding claim 1, Moulder et al. discloses the in-line dispenser (column 1, lines 10-11) for adding a dispersible solid (column 1, lines 11-13) to a flow of liquid (column 1, line 11) comprising a liquid conduit (Fig. 2, #40) having a tubular wall (column 2, line 38) and extending between an inlet and an outlet (column 2, lines 36-37), and a container (Fig. 1, #10) for the dispersible solid having at least one wall comprising at least a part of the tubular wall, wherein the at least a part of the tubular wall is permeable (Fig. 2, #40) to the liquid but is substantially impermeable to the dispersible solid (column 1, lines 43-45) but does not teach the flow restriction located in the liquid conduit. However Glazier et al. does disclose said flow restriction (Fig. 1, #14). Therefore it would have been obvious to one having ordinary skill in

Art Unit: 3700

the art at the time the invention was made to have motivation to combine the invention of Moulder et al. with the flow restriction of Glazier et al.

In regards to claim 2, Moulder et al. does not disclose that portions of said at least a part of the tubular wall are located upstream and downstream of the flow restriction, however Glazier et al. does disclose such features as the part of the tubular wall being located upstream (Fig. 1, #6) and downstream (Fig. 1, #7) of the flow restriction (Fig. 1, #14). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. with the part of the tubular wall being upstream and downstream of the flow restriction of Glazier et al.

Regarding claim 3, Moulder et al. discloses the tubular wall of said liquid conduit (Fig. 2, #40) however he does not teach the flow restriction comprising an annular formation. Glazier et al. does teach that the flow restriction comprises an annular formation (Fig. 1, #14). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. with the flow restriction comprising an annular formation of Glazier et al.

With regards to Claim 4, Moulder et al. does not disclose that the flow restriction is located centrally along the liquid conduit, however Glazier et al. does disclose that the flow restriction (Fig. 1, #14) is located centrally (Fig. 1, #'s 11 and 12) along the liquid conduit. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. with the flow restriction is located centrally along the liquid conduit of Glazier et al.

Art Unit: 3700

Regarding claim 5, Moulder et al. discloses that at least part of the tubular wall is rendered permeable by virtue of having one or more holes there through (Fig. 2, #40).

With regards to claim 6, Moulder et al. discloses the invention substantially as claimed. A tubular liquid conduit rendered permeable via a plurality of holes. However Moulder et al. does not disclose that one or more holes are of sufficiently small size to prevent passage there through of the dispersible solid. It is common knowledge in the prior art to include holes that are of sufficiently small size to prevent passage there through of the dispersible solid in the same field of endeavor for the purpose of a fertilizer dispenser. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include holes of sufficiently small size in order to prevent passage there through of the dispersible solid.

Regarding claim 7, Moulder et al. discloses that the holes are circular (Fig. 1, #40).

In regards to claim 11, Moulder et al. teaches that the liquid conduit extends between and is mounted between inlet and outlet ports of a main body, so that a space between the main body and the liquid conduit defines the container for holding the dispersible solid (column 1, lines 39-45).

With regards to claim 12, Moulder et al. teaches said main body comprises a cylindrical outer barrel and said conduit is mounted within and coaxially with said outer barrel (column 1, lines 39-42).

Regarding claim 13, Moulder et al. discloses that said barrel has a detachable closure at one end that when in position on said barrel closes the container at that end (column 1, lines 45-48 and Fig. 2, #74).

Art Unit: 3700

In regards to claim 14, Moulder et al. in view of Glazier et al. teaches the dispenser comprises attachment means for releasably connecting the dispenser to a water supply means (column 3, lines 13-14) and a distribution means (column 1, line 16).

Regarding claim 15, Moulder et al. teaches said attachment means comprises a screw thread matingly connectable to said water supply means (column 3, lines 11-14).

In regards to claim 20, Moulder et al. in view of Glazier et al. teaches said in-line dispenser charged with a substance selected from the group consisting of granular power formed into a solid body dissoluble by water and held in a solid body dissoluble by water causing a flow of water from the water supply means to the water distribution means through the dispenser (column 1, lines 10-19).

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moulder et al. (US Pat No 3,343,918) in view of Glazier et al. (US Pat No 968,462) and further in view of Jones et al. (US Pat No 3,567,124).

The teachings of Moulder et al. and Glazier et al. discloses the holes (column 2, line 38) but does not teach the slots. However, Jones et al. does teach the slots (column 2, line 23). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the in-line dispenser of Moulder et al. and Glazier et al. with the slots of Jones et al.

Art Unit: 3700

9. Claim 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moulder et al. (US Pat No 3,343,918) in view of Glazier et al. (US Pat No 968,462) and further in view of Knapp et al. (US Pat No 4,477,960).

With regards to claim 9, the teachings of Moulder et al. and Glazier et al. teaches the part of the tubular wall (Fig. 2, #40) but does not disclose that it is formed of a material that is inherently permeable to the liquid. However, Knapp et al. does disclose that it is formed of a material that is inherently permeable to the liquid (column 7, lines 5-7). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. in view of Glazier et al. with that the tubular wall is formed of a material that is inherently permeable to the liquid of Knapp et al.

Regarding claim 22, Moulder et al. in view of Glazier et al. does not disclose that the solid body has a bore which when the solid body is placed into the compartment surrounds the liquid conduit of the dispenser. However Knapp et al. does disclose the solid body has a bore which when the solid body is placed into the compartment surrounds the liquid conduit of the dispenser (lines 6-8 of paragraph 57). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. in view of Glazier et al. with the bore of the solid body as taught by Knapp et al.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moulder et al. (US Pat No 3,343,918) in view of Glazier et al. (US Pat No 968,462) further in view of Knapp et al. (US Pat No 4,477,960) and furthermore in view of Slade et al. (US Pat No 6,631,891).

Art Unit: 3700

Moulder et al. in view of Glazier et al. in further view of Knapp et al. does not disclose that the tubular wall comprises fibers that are woven. However Slade et al. does teach fibers that are woven (column 8, lines 3-5 and 6-11). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. in view of Glazier et al. in further view of Knapp et al. with that the tubular wall comprises fibers that are woven of Slade et al.

11. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moulder et al. (US Pat No 3,343,918) in view of Glazier et al. (US Pat No 968,462) and further in view of Kirschmann et al. (US Pat No 4,477,960).

Regarding claim 16, Moulder et al. in view of Glazier et al. does not disclose that the attachment means is snap-fittingly securable to said water supply means or said distribution means. However Kirschmann et al. teaches the attachment means is snap-fittingly securable (column 3, lines 12-17). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. in view of Glazier et al. with the snap-fitting means of Kirschmann et al.

With regards to claim 17, Moulder et al. in view of Glazier et al. does not disclose filter means, however Kirschmann does teach filter means (column 3, line 49). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. in view of Glazier et al. with the filter means of Kirschmann et al.

Regarding claim 18, Moulder et al. in view of Glazier et al. does not disclose that the filter means is positioned downstream of the container. However Kirschmann et al. does teach that the filter means (Fig. 2, #44) is positioned down stream of the container (Fig. 2, #28). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. in view of Glazier et al. with the filter means positioned down stream of the container of Kirschmann et al.

With regards to claim 19, Moulder et al. in view of Glazier et al. does not teach the dispenser comprising a check valve positioned up stream of the liquid conduit. However Kirschmann et al. does teach the check valve (column 3, line 21) positioned upstream of the liquid conduit (Fig. 2, #58). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have motivation to combine the invention of Moulder et al. in view of Glazier et al. with the check valve positioned up stream of the liquid conduit of Kirschmann et al.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thornton et al. (US Pub No 2002/0092926) teaches a lawn chemical application system. Newton et al. (US Pat No 6,230,982) teaches a fluid dispersing valve. Sealy et al. (US Pat No 5,133,498) discloses an apparatus for dispensing/applying a material. Jarman et al. (US Pat No 2,647,732) teaches a fluid mixing chamber. Rowlett et al. (US Pat No 2,639,945) discloses a Car, Floor and Wall washer. Fitzgerald et al. (US Pat No 2,485,723) teaches a fire-fighting apparatus. Faber et al. (US Pat No 1,734,164) teaches a means for producing fire-

Art Unit: 3700

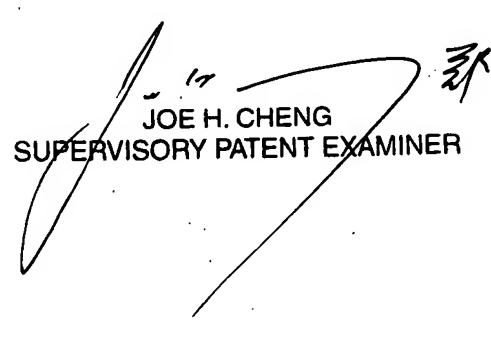
extinguishing foam. Eccardt et al. (US Pat No 1,993,923) discloses a salt water shower. Jetzer-Gysin et al. (CH Pub No 000604474) teaches lawn watering equipment with fertilizer supply. Slade et al. (US Pat No 3,923,934) teaches a dispensing device with a water permeable material.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven M. Cernoch whose telephone number is (571) 270-3540. The examiner can normally be reached on M-T, 730-5, F1 -Off, F2 730-5 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Cheng can be reached on (571) 272-4433. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SMC
9/24/2007


JOE H. CHENG
SUPERVISORY PATENT EXAMINER